

## WE CLAIM

1. A printing cartridge that comprises  
a housing; and  
an actuating formation that is positioned on the housing and is capable of actuating a number of capacitive sensors in an array of such sensors, the actuating formation being configured to represent data relating to a characteristic of the printing cartridge, so that the capacitive sensors, when actuated, together generate a signal carrying such data.
2. A printing cartridge as claimed in claim 1, in which a media colorant supply arrangement is positioned within the housing and the actuating formation is configured to represent data relating to the media colorant so that a signal generated by the capacitive sensors, when actuated, carries said data relating to the media colorant.
3. A printing cartridge as claimed in claim 2, wherein the data represented by the actuating formation relates to at least one of: a serial number identifying the media colorant, a type of the media colorant, a viscosity of the media colorant, a surface tension of the media colorant, optical characteristics of the media colorant and an optimal ink drop volume corresponding to a type of media.
4. A printing cartridge as claimed in claim 1, in which a media supply is positioned in the housing and the actuating formation is configured to represent data relating to the media so that a signal generated by the capacitive sensors, when actuated, carries said data relating to the media.
5. A printing cartridge as claimed in claim 4, wherein the data represented by the actuating formation relates to at least one of: a serial number identifying the media, a type of the media and a length of the media.
6. A printing cartridge as claimed in claim 1, in which media and media colorant supply arrangements are positioned within the housing and the actuating formation is configured to represent data relating to the media and the media colorant so that a signal generated by the capacitive sensors, when actuated, carries said data relating to the media and the media colorant.
7. A printing cartridge as claimed in claim 6, wherein the data represented by the actuating formation relates to at least one of: a serial number identifying the media, a serial number identifying the media colorant, a length of the media, a type of the media, a viscosity of the media colorant, a surface tension of the media colorant, optical characteristics of the media colorant and an optimal ink drop volume of the media colorant corresponding to the type of media.
8. A printing cartridge as claimed in claim 1, wherein a conductive material defines the actuating formation so that the actuating formation and a capacitive plate of each of said number of capacitive sensors define a capacitor.

9. A printing cartridge as claimed in claim 8, in which the actuating formation is defined by a plurality of projections that extend from the housing in an array which represents the data, each projection corresponding with a capacitive plate of each capacitive sensor of said number of capacitive sensors.
10. A printing cartridge as claimed in claim 1, in which the actuating formation is the product of an injection micromolding process.